

P.B.5818 - Patentlaan 2 2280 HV Rijswijk (ZH) 2 +31 70 340 2040 TX 31651 epo nl FAX +31 70 340 3016 Europäisches Patentamt

Zweigstelle in Den Haag Recherchenabteilung Europ an Patent Office

Branch at The Hague Search division Offic europé n des br v ts

Département à La Haye Division de la recherche

HOFFMANN - EITLE Patent- und Rechtsanwälte Arabellastrasse 4 *81925 München

EINGEGANGEN

11, Aug. 2003

HOPFMANN - EITLE, MÜNCHEN PATENTANWÄLTE RECHTSANWÄLTE

Datum/Date 11.08.03

Zeichen/Ref./Réf.

ALLEMAGNE

98 652 a/scho

Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.

03012127.1-2207-

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
MITSUBISHI DENKI KABUSHIKI KAISHA

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above–mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

∆ abstract

X title

The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

2

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





2

EUROPEAN SEARCH REPORT

Application Number · EP 03 01 2127

		ERED TO BE RELEVAN	<u> </u>	
Category	Citation of document with i	ndication, where appropriate, sages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
X	PATENT ABSTRACTS OF vol. 1997, no. 08, 29 August 1997 (199 & JP 09 103052 A (M CORP), 15 April 199	7-08-29) HITSUBISHI ELECTRIC	1,3,4	H02K1/16 H02K3/12 H02K3/28
Y	* abstract *		2	
Y	US 5 592 731 A (HUA 14 January 1997 (19 * column 5, line 47 figures 1-7 *		2	
A	DE 196 33 399 A (SI 26 February 1998 (1 * abstract; figures	998-02-26)	1,3-6	
Y,D	PATENT ABSTRACTS OF vol. 1999, no. 11, 30 September 1999 (& JP 11 155270 A (D 8 June 1999 (1999-0 * abstract *	1999-09-30) ENSO CORP),	1,4	TECHNICAL FIELDS SEARCHED (Int.CI.7)
Y	DE 17 63 506 A (LIC 11 November 1971 (1 * page 3, line 19 - figure 1 *	971-11-11)	1,4	H02K
A	PATENT ABSTRACTS OF vol. 1999, no. 04, 30 April 1999 (1999 & JP 11 018378 A (D 22 January 1999 (19 * abstract *	-04-30) ENSO CORP),		
		_/		
	The present search report has	been drawn up for all claims		
	Place of search	Date of completion of the search	, ,	Examiner
	MUNICH	1 August 2003	Tai	ngocci, A
X : parti Y : parti docu A : tech O : non-	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot iment of the same category inological background—written disclosure mediate document	E : earlier pater after the filin her D : document ci L : document ci	nciple underlying the it document, but pub g date ited in the application led for other reasons the same patent fam	lished on, or



2

EUROPEAN SEARCH REPORT

Application Number FP 03 01 2127

1	DOCUMENTS CONSID	ERED TO BE RELEVANT	<u> </u>		
Category	Citation of document with i of relevant pas	ndication, where appropriate, sages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
Υ	US 5 982 068 A (KUS 9 November 1999 (19 * column 4, line 10 figures 1-19 *		1-6		
Y	US 4 102 040 A (RIC 25 July 1978 (1978- * column 8, line 9 figures 1-17 *		1-6		
<i>f</i>	PATENT ABSTRACTS OF vol. 007, no. 226 (7 October 1983 (198 & JP 58 116031 A (T KK), 11 July 1983 (* abstract *	E-202), 3-10-07) OKYO SHIBAURA DENKI	7		
r	EP 0 917 278 A (DEN 19 May 1999 (1999-0 * column 4, line 57 figures 1-5 *		1,3,4,6	TECHNICAL FIELDS SEARCHED (Int.CI.7)	
(
,	PATENT ABSTRACTS OF vol. 011, no. 061 (25 February 1987 (1 & JP 61 221559 A (M CO LTD), 1 October * abstract *	E-483), 987-02-25) ATSUSHITA ELECTRIC IND	7		
		<u></u>			
	The present search report has	been drawn up for all claims			
		Date of completion of the search 1 August 2003	Tan	Examiner GOCCI, A	
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anoument of the same category inological background—written disclosure rmediate document	T: theory or prin E: earlier patent after the filing ther D: document cit	ciple underlying the in document, but publis date ed in the application ed for other reasons	nvention shed on, or	



2

EUROPEAN SEARCH REPORT

Application Number

EP 03 01 2127

	DOCUMENTS CONSID	ERED TO BE RELEVAN	T	
Category	Citation of document with it of relevant pass	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
Y	PATENT ABSTRACTS OF vol. 2000, no. 01, 31 January 2000 (20 & JP 11 285216 A (D 15 October 1999 (19 * abstract *	00-01-31) ENSO CORP),	1	
Y	PATENT ABSTRACTS OF vol. 007, no. 027 (3 February 1983 (19 & JP 57 183236 A (M 11 November 1982 (1 * abstract *	E-156), 83-02-03) ITSUBISHI DENKI KK),	1	·
				TECHNICAL FIELDS SEARCHED (Int.CI.7)
	The present search report has t			
	Place of search MUNICH	Date of completion of the searce 1 August 2003		Examiner JOCCI, A
X : parti Y : parti docu A : tech O : non-	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anote ment of the same category nological background -written disclosure mediate document	T : theory or pr E : earlier pate after the filir D : document c L : document c	inciple underlying the ir int docurnent, but publis ig date ited in the application ited for other reasons	nvention thed on, or

This annex lists the patent family membersrelating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-08-2003

	cited in search rep	ort	date		member(s)	date
JP	09103052	Α	15-04-1997	JP US	3346968 B2 6317962 B1	18-11-200 20-11-200
	 5592731	A	 14-01-1997	 US	5382859 A	17-01-199
00	3332731	^	14 01 1997	AT	173567 T	15-12-199
				ΑÚ	4842293 A	29-03-199
	•			CA	2143637 A1	17-03-199
				DE	69322167 D1	24-12-1998
				DE	69322167 T2	10-06-199
				ĒΡ	0658291 A1	21-06-199
				JP	8505036 T	28-05-1990
				JP	3350889 B2	25-11-200
				WO	9406192 A1	17-03-199
DE	19633399	Α	26-02-1998	DE	19633399 A1	26-02-1998
				DE 	29623073 U1	16-10-1997
JP	11155270	Α	08-06-1999	JP	2927288 B2	28-07-1999
				JP	11164500 A	18-06-1999
				JP	11164504 A	18-06-1999
				JP	11075347 A	16-03-1999
				JP	11075346 A	16-03-1999
				JP JP	11075334 A 3303773 B2	16-03-1999 22-07-2008
				JP	11164506 A	18-06-199
				JP	11164519 A	18-06-1999
				JP	11234933 A	27-08-1999
				ĴΡ	3271582 B2	02-04-200
				JP	11187599 A	09-07-1999
				JP	11191946 A	13-07-1999
DE	1763506	A	11-11-1971	DE	1763506 A1	11-11-197
JP	11018378	Α	22-01-1999	NONE		
US	5982068	Α	09-11-1999	WO	9854822 A1	03-12-1998
				JP	3303773 B2	22-07-200
				JP	11164506 A	18-06-1999
				AU	3686799 A	02-09-1999
				AU	4222897 A	30-12-1998
				AU	710990 B2	07-10-1999
				AU	5829198 A	03-12-1998 13-07-1999
				BR BR	9801214 A	05_10_100
				C A	9801695 A	26-11-199
				CA	2238504 A1	26-11-199
	details about this a	annex : see	e Official Journal of the I	European P	atent Office, No. 12/82	:

This annex lists the patent family members relating to the patent documents cited in the above–mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-08-2003

JS 5982068 A	CA CN CCN DE DE DE DE DE EPP EPP EPP EPP EPP EPP	2238600 A 1202028 A 1208277 A 1208985 A 1200591 A 69800498 D 69801259 D 69801259 T 69803217 D 69803217 T 69803813 D 69803813 D 69803813 D 69803900 D 69803900 D 6981564 D 69812477 D 1026810 A 1179881 A 1179881 A 1237254 A 1227567 A 0881752 A 0881747 A 0881748 A 0881748 A 0881749 A 0881749 A 0881750 A	, B , B , B , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1	26-11-199 16-12-199 17-02-199 24-02-199 02-12-199 01-03-200 06-09-200 21-02-200 21-02-200 22-08-200 12-09-200 23-01-200 03-04-200
	CN CN CN DE DE DE DE DE EP EP EP EP EP EP EP	1202028 A 1208277 A 1208985 A 1200591 A 69800498 D 69801259 D 69801259 T 69803217 D 69803217 T 69803813 D 69803813 T 69803900 D 69803900 D 69810008 D 69812477 D 1026810 A 1179881 A 1237254 A 1227567 A 0881752 A 0881752 A 0881744 A 0881744 A 0881744 A 0881749 A	, B , B , B , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1 , 1	16-12-199 17-02-199 24-02-199 02-12-199 01-03-200 06-09-200 13-06-200 21-02-200 29-08-200 12-09-200 28-03-200 12-09-200 03-04-200
	CN CN CDE DE DE DE DE DE EP EP EP EP EP EP EP	1208277 A 1208985 A 1200591 A 69800498 D 69800498 T 69801259 D 69803217 D 69803217 T 69803813 D 69803813 T 69803900 D 69803900 D 69810008 D 69811564 D 69812477 D 1026810 A 1179881 A 1237254 A 1227567 A 0881752 A 0881752 A 0881744 A	, B 11 12 12 12 11 11 11 11 11 12 12 12 12	17-02-199 24-02-199 02-12-199 01-03-200 06-09-200 13-06-200 21-02-200 29-08-200 12-09-200 28-03-200 12-09-200 30-04-200 03-04-200 03-04-200 03-04-200 03-04-200 03-04-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	CN CN DE DE DE DE DE DE EP EP EP EP EP EP	1208985 A 1200591 A 69800498 D 69800498 T 69801259 T 69803217 D 69803217 T 69803813 D 69803813 T 69803900 D 69803900 D 69810008 D 69812477 D 1026810 A 1179881 A 1237254 A 1227567 A 0881752 A 0881752 A 0881744 A	1 1 2 1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 1 1 1 2	24-02-199 02-12-199 01-03-200 06-09-200 13-06-200 21-02-200 29-08-200 12-09-200 28-03-200 12-09-200 30-04-200 03-04-200 03-04-200 03-04-200 03-04-200 03-04-200 03-04-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	CN DE DE DE DE DE DE DE EP EP EP EP EP EP	1200591 A 69800498 D 69800498 T 69801259 D 69801259 T 69803217 T 69803217 T 69803813 D 69803900 D 69803900 D 69810008 D 69811564 D 69812477 D 1026810 A 1179881 A 1237254 A 1227567 A 0881752 A 0881752 A 0881747 A 0881744 A	1 2 1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 2 2 2 2 2 1 2 2 1 2	02-12-199 01-03-200 06-09-200 13-06-200 21-02-200 29-08-200 12-09-200 28-03-200 12-09-200 23-01-200 03-04-200 03-04-200 03-04-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE DE DE DE DE EP EP EP EP EP EP	69800498 D3 69800498 T3 69801259 D3 69803217 D3 69803217 T4 69803813 D3 69803813 T4 69803900 D3 69810008 D3 69811564 D3 69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A2 0881752 A3 0881752 A3 0881744 A2 0881744 A2 0881744 A2 0881744 A2	21 22 12 12 12 12 11 11 11 12 12 12 12 1	01-03-200 06-09-200 13-06-200 21-02-200 29-08-200 12-09-200 28-03-200 12-09-200 23-01-200 03-04-200 03-04-200 03-04-200 03-04-200 03-04-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE DE DE DE EP EP EP EP EP EP	69800498 T2 69801259 D2 69801259 T2 69803217 D2 69803217 T2 69803813 D2 69803900 D2 69803900 D2 69810008 D2 69811564 D2 69812477 D2 1026810 A2 1179881 A2 1237254 A2 1227567 A2 0881752 A3 0881752 A3 0881744 A2 0881744 A2 0881744 A2 0881744 A2	2 1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 2 2 2 2	06-09-200 06-09-200 13-06-200 21-02-200 29-08-200 12-09-200 28-03-200 12-09-200 03-04-200 03-04-200 03-04-200 04-09-200 03-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE DE DE DE EP EP EP EP EP EP EP	69801259 D3 69801259 T3 69803217 D3 69803217 T4 69803813 D3 69803800 D3 69803900 D3 69810008 D3 69811564 D3 69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A2 0881752 A3 0881756 A3 0881747 A2 0881744 A2 0881744 A2 0881744 A2	1 2 1 2 1 2 1 2 1 1 1 1 1 1 1 2 2 2 2 2	06-09-200 13-06-200 21-02-200 29-08-200 12-09-200 28-03-200 12-09-200 23-01-200 03-04-200 03-04-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE DE DE DE EP EP EP EP EP EP EP	69801259 TZ 69803217 DZ 69803217 TZ 69803813 TZ 69803900 DZ 69803900 DZ 69810008 DZ 69811564 DZ 69812477 DZ 1026810 AZ 1179881 AZ 1227567 AZ 0881752 AZ 0881752 AZ 0881744 AZ 0881744 AZ 0881744 AZ 0881744 AZ 0881749 AZ	2 1 2 1 2 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2	13-06-200 21-02-200 29-08-200 21-03-200 12-09-200 28-03-200 12-09-200 03-04-200 03-04-200 03-04-200 04-09-200 031-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE DE DE EP EP EP EP EP EP EP	69803217 D2 69803217 T2 69803813 D2 69803813 T2 69803900 D2 69803900 T2 69810008 D2 69811564 D2 69812477 D2 1026810 A2 1179881 A2 1237254 A2 1227567 A2 0881752 A2 0881754 A2 0881744 A2 0881744 A2 0881744 A2 0881749 A2	1 2 1 2 1 2 1 1 1 1 1 1 2 2 2 2 2 2 2 2	21-02-200 29-08-200 21-03-200 12-09-200 28-03-200 12-09-200 03-04-200 09-08-200 04-09-200 04-09-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE DE EP EP EP EP EP EP EP	69803217 T2 69803813 D3 69803813 T2 69803900 D3 69803900 T2 69810008 D3 69811564 D3 69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A2 0881752 A3 0881752 A3 0881744 A2 0881744 A2 0881744 A2 0881744 A2 0881744 A2	2 1 2 1 2 1 1 1 1 1 1 2 2 2 2 2 2	29-08-200 21-03-200 12-09-200 28-03-200 12-09-200 23-01-200 03-04-200 09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE DE EP EP EP EP EP EP EP	69803813 D3 69803813 T3 69803800 D3 69803900 T3 69810008 D3 69811564 D3 69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A3 0881752 A3 0881756 A3 0881747 A3 0881744 A3 0881744 A3 0881748 A3 0881749 A3	1 2 1 2 1 1 1 1 1 1 1 2 2 1 2 2 2 2 2 2	21-03-200 12-09-200 28-03-200 12-09-200 23-01-200 03-04-200 09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE EP EP EP EP EP EP EP	69803813 Ta 69803900 Da 69803900 Ta 69810008 Da 69812477 Da 1026810 Aa 1179881 Aa 1237254 Aa 1227567 Aa 0881752 Aa 0881747 Aa 0881744 Aa 0881744 Aa 0881744 Aa	2 1 2 1 1 1 1 1 1 2 1 1 1 2 2 2 2 2 2	12-09-200 28-03-200 12-09-200 23-01-200 03-04-200 09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE DE EP EP EP EP EP EP EP	69803900 Di 69803900 Ti 69810008 Di 69811564 Di 69812477 Di 1026810 Ai 1179881 Ai 1237254 Ai 1227567 Ai 0881752 Ai 0881747 Ai 0881744 Ai 0881744 Ai 0881744 Ai	1 2 1 1 1 1 1 1 2 1 1 1 2 2 2 2 2	28-03-200 12-09-200 23-01-200 03-04-200 09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE DE EP EP EP EP EP EP EP	69803900 T2 69810008 D3 69811564 D3 69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A2 0881752 A3 0881756 A3 0881747 A2 0881744 A2 0881744 A2 0881744 A2	2 1 1 1 1 1 1 2 1 1 2 2 2 2 2	12-09-200 23-01-200 03-04-200 30-04-200 09-08-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE EP EP EP EP EP EP EP	69810008 D3 69811564 D3 69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A2 0881752 A3 0881747 A2 0881744 A2 0881748 A2 0881749 A2	1 1 1 1 1 1 2 1 1 1 2 2 2 2 2	23-01-200 03-04-200 30-04-200 09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE DE EP EP EP EP EP EP EP	69811564 D3 69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A2 0881752 A3 0881756 A3 0881747 A2 0881744 A2 0881744 A2 0881744 A2	1 1 1 1 2 1 1 2 2 2 2 2	03-04-200 30-04-200 09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE EP EP EP EP EP EP EP	69812477 D3 1026810 A3 1179881 A3 1237254 A3 1227567 A2 0881752 A3 0881747 A2 0881744 A2 0881744 A2 0881748 A2 0881749 A2	1 1 1 1 2 1 1 2 2 2 2 2	30-04-200 09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	DE EP EP EP EP EP EP EP	1026810 A1 1179881 A1 1237254 A1 1227567 A2 0881752 A1 0881747 A2 0881747 A2 0881744 A2 0881748 A2 0881749 A2	1 1 1 2 1 1 2 2 2 2	09-08-200 13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP EP EP EP EP EP	1179881 A1 1237254 A1 1227567 A2 0881752 A1 0881756 A1 0881747 A2 0881744 A2 0881744 A2 0881749 A2	1 1 2 1 1 2 2 2 2	13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP EP EP EP EP	1179881 A1 1237254 A1 1227567 A2 0881752 A1 0881756 A1 0881747 A2 0881744 A2 0881744 A2 0881749 A2	1 1 2 1 1 2 2 2 2	13-02-200 04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP EP EP EP EP	1237254 A1 1227567 A2 0881752 A1 0881756 A1 0881747 A2 0881742 A2 0881744 A2 0881748 A2	1 2 1 1 2 2 2 2	04-09-200 31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP EP EP EP	1227567 A2 0881752 A1 0881756 A1 0881747 A2 0881742 A2 0881744 A2 0881748 A2 0881749 A2	2 1 1 2 2 2 2 2	31-07-200 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP EP EP EP	0881752 A1 0881756 A1 0881747 A2 0881742 A2 0881744 A2 0881748 A2 0881749 A2	1 1 2 2 2 2 2	02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP EP EP	0881756 A1 0881747 A2 0881742 A2 0881744 A2 0881748 A2 0881749 A2	1 2 2 2 2	02-12-199 02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP EP	0881747 A2 0881742 A2 0881744 A2 0881748 A2 0881749 A2	2 2 2 2	02-12-199 02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP	0881742 A2 0881744 A2 0881748 A2 0881749 A2	2 2 2	02-12-199 02-12-199 02-12-199 02-12-199
	EP EP EP	0881744 A2 0881748 A2 0881749 A2	2 2	02-12-199 02-12-199 02-12-199
	EP EP	0881748 A2 0881749 A2	2	02-12-199 02-12-199
	EΡ	0881749 A2		02-12-199
	EF			02-12-199
	ED.			
	EP	0881745 A2		02-12-199
•	EP	0881746 A2		02-12-199
	EP	0881751 A2		02-12-199
	EP	0881743 A2		02-12-199
	EP	0881753 A2		02-12-199
	ES	2154065 T3		16-03-200
	ES	2187855 T3		16-06-200
	JP	11164505 A		18-06-199
	JP 	3407643 B2	2 	19-05-200
JS 4102040 A 25-07-1978	FR	2316776 A1		28-01-197
	FR	2341976 A2		16-09-197
	FR	2342576 A1		23-09-197
	BR	7604385 A		26-07-197
	DE	2629532 A1	1 .	27-01-197
ore details about this annex : see Official Journal of the Ec	ES	449497 A1	1	16-08-197

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-08-2003

	Patent document cited in search repo	rt	Publication date		Patent fam member(Publication date
US	4102040	Α		GB IT JP	1546911 1074246 52034301	В	31-05-1979 17-04-1985 16-03-1977
JP	58116031	Α	11-07-1983	JP JP	1595608 2013539		27-12-1990 04-04-1990
EP	0917278	A	19-05-1999	CN DE DE DE DE EP JP JP US US	69801475 69804284	D1 T2 D1 T2 D1 T2 A1 A1 A2 B2 A A A	17-02-1999 06-09-2001 13-06-2002 04-10-2001 16-05-2002 25-04-2002 31-10-2002 02-12-1998 21-04-1999 19-05-1999 04-03-2003 18-06-1999 07-09-1999 07-04-2000 01-08-2000 01-02-2000 18-07-2000
GB	2108772	A	18-05-1983	AU CA IN JP ZA	8847582 1183568 157129 58086836 8206900	A1 A1 A	12-05-1983 05-03-1985 25-01-1986 24-05-1983 26-10-1983
JP	61221559	Α	01-10-1986	NONE			
JP	11285216	Α	15-10-1999	NONE			
JP	57183236	Α	11-11-1982	NONE			

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82